CUGI

Newsletter

January 1992

In this issue...

Just Imagine
Modems Made Easy
Starting Up Again
A CUGI BBS?

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January 1992

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Editorial

"Sorry, Geoff … but I didn't quite get it all done in time. Here's the disk!" I'd heard these words before. It would strike fear into any ordinary person but then I'm definitely not ordinary(!) and, anyway, Ed had actually had done most of the work preparing this newsletter. It's not as big as some previous issues but we've always prided ourselves on quality rather than quantity. And so, while our editor is freezing in the sub-zero temperatures of Minnesota, we can smile knowing it's only about 0° here!

Christmas and the New Year brought many of our members the new A500 Plus with its 2.04 OS leaving many of us muttering under under our breath about the lack of the Upgrade Pack. It is now available and includes four disks (KickStart, WorkBench, Extras and Fonts), two manuals (*Using the System Software* and *2.0 Bridge Manual*, the latter explaining the major changes between 1.3 and 2.0) and, of course, a KickStart ROM.

The general reaction to this new OS within the club has been very favourable with only a few members expressing serious regrets about old software, improperly coded, not working under 2.0. It is unfortunate that this has happened but you must remember that it is not a case of "this is the price you pay for progress" but rather a case of "this is the programmer's fault". I must admit, that I'll miss some demos (I believe *PUGGS in Space* is such a victim.

Talking of new computers, Ed reminded me (twice!) that *HAL* was born a few weeks ago—12 January 1992, I think he said. I wrote it down somewhere but I recently did a bit of tidying and I can't find anything now. Apparently, the date given in the film differs from that in the book. As I recall, the film dated its birth later (1995) presumably to give it (the film) a longer viewing life.

Talking of films (I could make a series beginning paragraphs like this), *Star Trek VI* is just great. For us old folk for whom *Star Trek* was, is and will be the sci-fi series of the century, it is sad to think that James Tiberius Kirk has finally retired. What will we do without Spock and doors that go *whoosh*? Hmmm … never mind, *Star Trek—The Next Generation* series is doing pretty well and the first three *Star Wars* movies have still to be made. They could be good despite the choice of leading prat.

Talking of prats (arrgghh I'm addicted), Ed will be back soon looking for articles for the April issue and in the meantime, I'll have to incite you to put pen to paper … and if that phrase doesn't give away my age, nothing will! Read and enjoy.

G.J.R.

Startup II—The Sequel

by James Ruane

Well. hopefully since the last article, you all have a rudimentary knowlege of what exactly a Startup-Sequence does. This time. I'm going to look at some more advanced topics.

Writing your own Startup-Sequences

If you want to write a startup-sequence from scratch. there's a few things to remember. You don't have to have a complicated Startup-Sequence, as this example (taken from the INTERCEPTOR disk) shows:

```
BindDrivers
LoadWb
endcli > nil:
```

All it does is load the Expansion drivers (from the Expansion drawer), load the Workbench, and quit the CLI. A simple Startup-Sequence such as this could be used for (say) a self-booting AmigaBasic workdisk. However, if you want to load the workbench, these libraries must be in the LIBS: directory:

Icon.library, Info.Library, (If you want to use the INFO pull-down command)

It would also be a good idea to add ARP.library to the LIBS: directory as well.

Some programs require Assignments to be made, for example on the CUGI DICE Disk:

```
assign t:  ram:t
assign env:  ram:env
assign dlib:  dice1:dlib
assign dinclude:  dice1:include
```

Or if running from a Hard drive, an assign of the distribution disk's name is used:

```
assign Ncomm: HardDisk:Ncomm
```

Other programs require certain devices to be mounted. for example any program using the Amiga's built in Speech Synthesis will use the SPEAK:

device. PIPE: handles pipes (Surprise, surprise) which are a way of linking two programs:

```
run More <pipe:a
dir >pipe:a
```

Upon typing the second line, more will pop up and display the current directory's contents.

Other devices include AUX: which is used to operate a limited serial port terminal (not a modem). Details for these devices are contained in the DEVS:Mountlist file. Some DOS-oriented programs (MessyDOS, RamDrives, Virtual Drives, etc) require you to edit the mountlist and insert a custom entry for that device.

A slightly more complicated startup-sequence would read:

```
setpatch >NIL:
Echo "COMMSDISK is BOOTING"
cd sys:c
Setmap GB
Dir RAM:
makedir RAM:t
makedir RAM:env
makedir RAM:clipboards
assign T:      RAM:t
assign ENV:    RAM:env
assign Clips: ram:clipboards
assign Ncomm: SYS:
mount aux:
winsize
cd /
run Get_SET_GO! jrmenu
```

What it does is run Setpatch, echo some stuff to the screen, set the keymap, setup some stuff in ram: and start a menu program.

Using CShell

However, for really efficient startups, I would advise using CShell (By Matt Dillon and a plethora of others) which is now up to version 5.15 (by Dominik Mueller). It is a replacement for the Commodore-supplied Shell and CLI, but with many more features. Its main attribute is that all of its commands are built into the shell, thus there is no disk access for a lot of commands (See list below).

CShell Commands:

```
abortline    action      addbuffers  alias      ascii      aset
assign       basename    cat         cd         class      close
copy         cp          date        dec        delete     dir
diskchange   echo        else        endif      error      exec
fault        filenote    flist       fltlower   fltupper   foreach
forever      forline     fornum      getenv     goto       head
help         history     howmany     htype      if         inc
info         input       join        keymap     label      local
linecnt      ls          man         md         mem        menu
mkdir        mv          open        path       pri        protect
ps           pwd         qsort       quit       rback      rename
readfile     relabel     resident    return     rm         rpn
rxrec        rxsend      run         search     set        setenv
sleep        split       source      stack      strhead    strings
strleft      strlen      strmid      strright   strtail    tackon
tail         tee         touch       truncate   type       unalias
uniq         unlocal     unset       usage      version
waitforport  whereis     window
```

As you can see, its like having the entire C: directory resident in RAM. In addition, CShell is excellent for startup-sequences. My workbench startup-sequence hands control over to CShell, and this script:

```
#
#   Workbench custom startup using CShell
#
#   Done on 26.05.91
#
window -l -a
set _titlebar "CSH V5.15 --- MEGAbench"
#
#   This bit is standard Workbench Startup
```

```
#
if -n $startup = 1
   set startup 1
   Addbuffers Df0: 10
   cd c:
   echo "Welcome to Workbench"
   echo "By J Ruane"
   echo "26.05.91"
   echo " "
   Sys:System/Fastmemfirst
   Sys:System/Setmap GB
   stack 20000
   BindDrivers
   resident CLI L:Shell-Seg SYSTEM pure add
   resident c:execute >NIL:
   mount newcon:
#
#  And this is Startup II
#
   resident C:List >NIL:
   resident C:mount >NIL:
   makedir ram:t
   assign T: RAM:T
   makedir RAM:env
   assign ENV: ram:env
   makedir ram:clipboards
   assign CLIPS: ram:clipboards
   mount speak:
   mount aux:
   mount pipe:
#
#   Now startup-sequence continues
#
```

```
    assign bin: sys:bin
    assign ME:  MegaExtras:
    C:path ram: c: bin: sys:system sys:utilities sys:prefs add
    copy SYS:s/ramicon ram:disk.info >NIL:
    loadwb
#
#   Put all utilities you want on startup in here
#
    cd sys:utilities
    rback ZeroVirus -i -0 -0 >NIL:
    echo "ZeroVirus installed."
    cd SYS:bin
    dmouse -a8
    blitzfonts >nil:
    echo "BlitzFonts Installed."
    fsdir >nil:
    echo "FSdir installed."
    background
    echo "BackGround Installed."
    PopUpMenu
    echo "PopUpMenu Installed."
    echo "PrintSpool installed."
    run Spool Ram:t/Spool.dat
    echo ""
    virushunter
    echo ""
#
#   Here ends all the once-off programs
#
endif
#
#   Every newshell should have these programs
#
```

```
cd sys:utilities
rback parm
#
#  Now for some Csh aliases
#
alias az    "SYS:Utilities/AZ"                # Starts AZ
alias sse   "az sys:s/startup.sh"             # Edit the
alias ess   "az sys:s/startup.sh"             # .. startup seq
alias mre   "rback sys:utilities/more"        # Short for More
alias 0     "cd df0:"                         # Quick cd df0:
alias 1     "cd df1:"                         # Quick cd df1:
alias 2     "cd df2:"                         # Quick cd df2:
alias cds   "sys:utilities/clickdos"          # Run ClickDOS
alias ply   "Sys:bin/Superplay"               # Play sample
alias prefs "Sys:Prefs/Preferences"           # Start Prefs
alias pfile "%i type ı >PRT:"                # Print file
alias cl    "%i cd ı; ls"                    # Cd to dir, list it
alias ctp   "ChangeTaskPri"                   # Change Shell prior
alias dq    "BIN:DMouse QUIT"                 # Quit DMouse
#
#  Two neat directory change and restore macros
#
#  push newdir  saves the current dir, goes to the newdir
#  pop          returns to what was the current dir
#
alias push  "%dir cd | input %lastdir; cd $dir"
alias pop   "cd $lastdir"
#
#  Must allow me to read the docs
#
alias dox   "rback SYS:utilities/More ME:doc/shell.doc"
#
#  Mount the other 'disk drives'
```

```
#
alias mll    "mount FF2:;Mount MS1:;Mount Ms2:"
#
alias topaz "ME:BinII/SetFont Topaz"          # Restore system font
alias big   "window -l -a -f"                 # BIG window
alias tiny  "window -s"                       # Small window
alias sw    "window -s"                       # Small window
alias vue   "rback SYS:bin/ppshow"            # Run PPshow
alias exe   "run execute "                    # For running scripts
#
#   Big cli window and exit
#
cd SYS:
window -l -a  -f
```

As you can see, CShell is a powerful program and should be used in preference to the Commodore-supplied CLI.

That concludes number two in the Startup series. Adios....

Personal Column

Lonely male with A1500 wishes to meet lonely female with genlock, with a view to making some good movies. Please send photograph (of genlock).

Good looking male with A500 and Music-X, wishes to meet female with MIDI keyboard to make some beautiful music together.

Single female with A3000 wishes to meet male with multisync monitor. No need for photo, just marry me.

Distressed male (Greystones) with 20 Megs wishes to meet female who doesn't think size is important.

Modems Made Easy

by Karl Jeacle

Computer communications can be one of the most baffling areas of computing to the beginner. Jargon everywhere. Virtually impossible to figure out what's going on. This article is going to be as simple as possible—only explaining what you need to know. We'll just stick with the basics.

Flashing Lights

First, what is a modem, and what does it do? A modem is a little box about the size of an external 5.25"disk drive. It will usually have a panel of status lights on the front, and at the back, sockets where you can plug your computer and telephone line into. The status lights on the front tend to flash on and off quite a lot, and really do a great job of impressing your friends.

The modem plugs into your computer's serial port using an 'RS-232' cable. Your computer sends digital 'bits' of information to the modem which in turn, converts these into analogue 'tones' which can be sent down the telephone line.

At the other end of the telephone connection will be another modem which just does the reverse of the above. It listens to the line, and converts tones back into 'bits' for the computer at the far end. The computer at the other end of a connection is sometimes known as the 'remote' computer.

Bulletin Boards & UseNet

What can you do with a modem? The main use would probably be to ring up local Bulletin Board Systems (BBS) where you can join discussions on all kinds of topics, send and receive messages to/from other BBS users, and 'download' public domain and shareware software for your computer.

If you're a bit more adventurous, you could try connecting to UseNet, and get access to international electronic mail and news for about IR£50 a year. There's an extensive article on UseNet in the April 1991 issue of the CUGI newsletter.

The 'V-Numbers'

The speed at which a modem can send or receive data is measured in 'bits per second' (bps). These speeds are what many of the 'v-numbers' are for:

v.21 = 300 bps

v.22 = 1200 bps

v.22bis = 2400 bps

v.32 = 9600 bps

v.32bis = 14400 bps

A normal character (numbers/letters of the alphabet) takes about 10 bits of data to transmit, so if you had a 2400bps modem, you would be able to receive about 240 characters per second. This isn't bad—3 full lines of text per second.

2400bps modems are the most common modems around these days. 300 and 1200bps are really a little slow, and 9600 and 14400 while super fast, are also super expensive! 2400bps modems are currently sold new in the UK for about STG£120.

Correction & Compression

Sending data down a noisy phone line is bad news. Information can be lost completely or garbled beyond recognition. To combat this, there are two forms of error correction widely used—MNP.4 and v.42.

Not all modems have error correction, so if an error free connection is to be made, both modems must support the same correction scheme. When they first connect, they tell each other which schemes they support, and then decide which (if any) to use.

This is pretty much the same situation as with Data Compression. Two main types—MNP.5 and v.42bis, both modems must support a common scheme, and many modems support neither. MNP.5 is the older of the two, and has a compression ratio of 2:1, while v.42bis can achieve rates of up to 4:1.

In practical terms, this means that if both your modem, and the modem you're calling supports v.42bis, then depending on what you're sending up and down the line, transfer speeds of up to 4 times the normal rate can be achieved.

It depends on what you're sending since some types of data will compress better than others. Generally, you'll be transfering either plain text or pre-compressed files like .zip, .lzh or .zoo files. Since plain text is uncompressed, the modem can compress it and shoot it down the line at up to 4 times the normal rate. Pre-compressed files, however, can't be cut down anymore, so will just be transfered at the normal rate.

Beware of companies that market their modems as 9600bps, when they're really only 2400bps with data compression built-in. This is just a marketing scam. Sure, if you're transferring just text, you can achieve speeds approaching 9600bps, but a lot of the time you will be transferring precompressed data. Current UK price for a 2400bps with v.42/v.42bis would be about STG£175.

I lied above somewhat. I'll confuse you now: v.42 is actually two protocols in one—it is its own scheme and the MNP.4 scheme. Not only that, but a modem with MNP.5 automatically has MNP.4, and a modem with v.42bis automatically has v.42.

This means that if you have a v.42bis modem, you can talk to another v.42bis with compression rates of up to 4:1, but if you talk to an MNP.5 modem, you won't get any compression, just MNP.4 error correction.

HST, PEP, CSP & friends

Above speeds of 2400bps with v.42bis, things start to get a little tricky. From the consumer's point of view, anyhow.

Up to now, we've been talking standards. All those 'v-numbers' are the work of the CCITT. The people in the CCITT tell the world what a modem needs to do to make it a v.22bis (or whatever), and all the manufacturers go out and make modems which comply with these instructions. This means that all modems talk the same language.

The problem with this is that the CCITT sometimes can be a little slow in getting these specifications out the door. This was the case after v.22bis. People were waiting for v.32 and then v.32bis to be finalised, so they could have 9600bps and 14400bps transfer speeds. They started to get impatient.

Companies like US Robotics produced the HST protocol, Telebit produced PEP, and now Compucom have CSP. All these protocols run at 9600bps or faster. Not only that, but the Compucoms are very cheap. The problem is, if you have a HST, it'll only run in high speed mode when talking to another HST. Same for Telebit and same for Compucom. You have to talk to a modem identical to yours. Otherwise the modem will just drop back and operate at v.22bis 2400bps.

Some companies, like US Robotics, provide 'Dual-Standard' modems. These are fine. They feature both the proprietary high speed protocol (HST in this case) and the CCITT high speed protocol—v.32 or v.32bis.

It all depends on who you're calling. Many BBS use HST since they got good Sysop deals on these modems from US Robotics. Telebit modems seem to be popular for a lot of Unix installations. CCITT v.32/v.32bis is the norm for universities and industry in general.

Conclusion

If you just want a 2400bps modem, no problem, go out and buy one. If you can afford it, pay the extra and try to get MNP.5 or better still, v.42bis.

If you're looking for high speed, as far as I'm concerned, CCITT standards are the way to go. Get a v.32bis if you can. These are here to stay, and will certainly outlast the others.

Before you buy though, try to find out what kind of modem the sites you'll be calling use. Only then will you know what's best for you. If you're still not sure, track down the comms gurus at CUGI sometime...

Dear Stephanie

Dear Stephanie,

I am writing to you about a problem, of which I am ashamed. It's my drive you see, it's far from adequate. My floppies are just as good as everyone elses, but when it comes to my hard, well, ashamed though I am to admit it, it's just not big enough.

When I originally got it, it was just as big, if not bigger than everyone else's, but over time, other peoples just grew bigger and mine just stayed the same size. It's really distressing when I'm out with the lads and they are comparing sizes and they start slagging me about the size of mine because they know it's very small.

What am I to do Stephanie. Please help me.

Yours sincerely,

Embarrassed, Greystones.

Dear Embarrassed, Greystones,

I read your letter and nearly started to laugh, but I realised that this was a very major problem to you. I know lots of people say "Size is not important" but they are lying. The fact is, the bigger the better, and quite honestly you don't come up to scratch. In this day and age, you can get special help to increase the size of it, but it costs a lot of money, and from what I can see, that's what your problem is. I am afraid that you are beyond help, until such time that you can come up with the readies.

Stephanie.

Imagine If You Will...

by Leon Hurst

> Government Health Warning
>
> 3D Ray Tracing and Animating can seriously affect you work, family life. and your hair.

Imagine ...*You spent last week creating your three dimensional A-10 aircraft. You go to the Attributes requester and select a camouflage texture for it. Flip over to the Stage Editor and you load the A-10 and the CraterLake.scape from Vista. Rotate the camera for a good angle on the A-10 while also revealing the Vista scape. Over to the rendering engine and you select Ray Trace mode, click on 'frame one' and Generate ...Depending on your CPU/FPU, or lack thereof, you go to bed or you make a cup of coffee.*

The above greatly typifies a session with Imagine. The setting of the scenes is quick but the rendering and creating of new objects are time gobblers. Before people start accusing me of not knowing my terms and for the benefit of 3D illiterates here follows a BRIEF explanation of some important terms which have and will be used:

RAY TRACING is a method of producing images from 3D coordinates by the actual mapping of rays of light. This produces images of the highest quality but is a time gobbler.

RENDERING is a method of generating images from the same 3D coordinates by making very good educated guesses at what is happening in the scene. Basically it does a little cheating. The quality of the results is not as good as Ray Tracing but its advantage in speed can be as much as forty fold. This term is also used to describe the actual generation of an image, whether it is of Ray Trace or Rendering quality.

ATTRIBUTES pertain to the material quality of a particular object. These include colour, luminosity, refractive index, reflectance etc.

PATHS are objects in there own right. They define by means of a 3D curve the change in trajectory over time of any objects assigned to it in an animation.

TRAJECTORY .. Look up the dictionary.

MORPHING is best described by the example of a red sphere which gradually changes into a blue cube. Where the blue cube can only be got from manipulations on the red sphere and NOT from creating it independently.

TWEENING is morphing and was also illustrated by Morph, the Plasticine man from Tony Hart's BBC 1 art programme of the early eighties. Morph became all manner of things during his sketches (hammers and the like), BUT he was always of the same piece of Plasticine.

So on to Imagine.

I would like to point out that while I am writing this article Imagine is running in the background so it is fully multitasking and I have not got the software to crash yet.

Imagine has five editors:

Project Editor - The actual rendering engine. Stage Editor - The platform where the scenes and animations are set-up. Cycle Editor - Where an object of many parts can be give its own animation. Detail Editor - 3D Modeller and where object attributes are assigned. Forms Editor - An Organic Object Orientated Modeller.

Starting with the Forms Editor this is a new departure in Amiga 3D modellers. It attempts to simulate organic shapes by using a Contour modelling system. There is a very steep learning curve associated with this type of modelling and I am at the very bottom of it. To date I have only used it to create very irregular shapes for space scenes, such as stars. It has also been used to create vases and other objects that can be made in the same way as pottery. As the manual states on more than one occasion, you should EXPERIMENT with it, which I feel is a real cop out. I would like to see some more tutorials on how to actually use the editor. I have seen some very realistic pieces of fruit created, so fantastic results are possible.

The Detail Editor would be very familiar to those that have used Sculpt. There are the four views (Down, Front and Right), and a perspective view which redraws whenever it can get some CPU time. So it doesn't hold up the system while it redraws itself. The main idea here is that you create you object around an axis so that an transformations done on the object will be done around this alterable axis. Objects are created by the joining of vertices (points) so that when three vertices are joined to give a triangle a face (surface) is now created. There is a small collection of predefined objects (primitives) such as spheres, torii, discs, etc. You will spend alot of your time in this editor creating your objects. It is a good idea to save your objects during their creation like you would long document on a Word Processor. Some operations are irreversible and an error here would completely destroy the object.

It is likely that you will begin to collect objects such as the Enterprise of Star Trek, a Terminator, flora and fauna, and so on. Disks of objects are available from many PD software houses, especially those in the states. But the better objects are available from around forty dollars a disk.

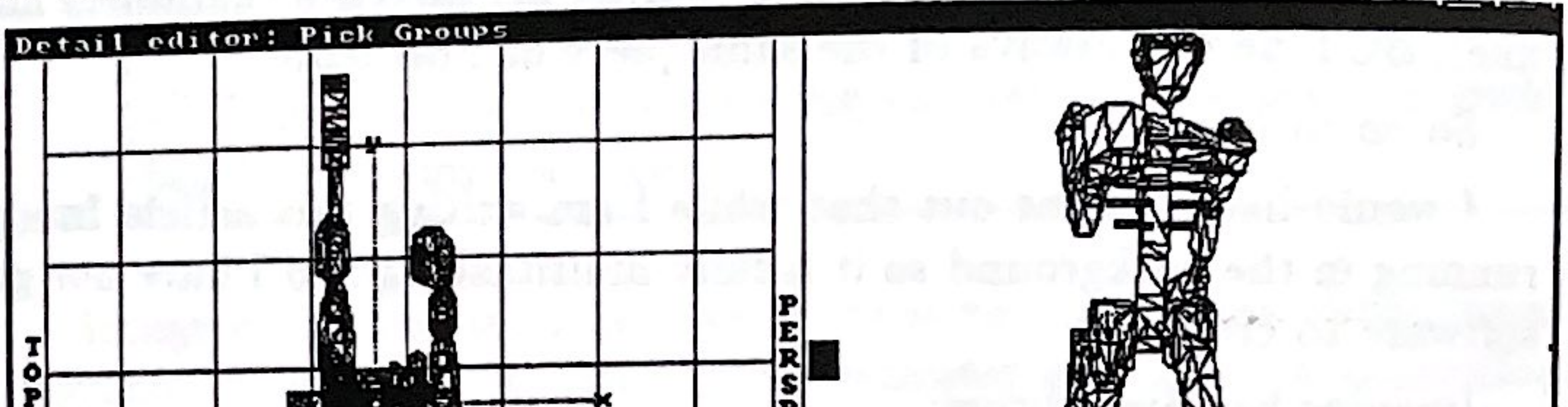
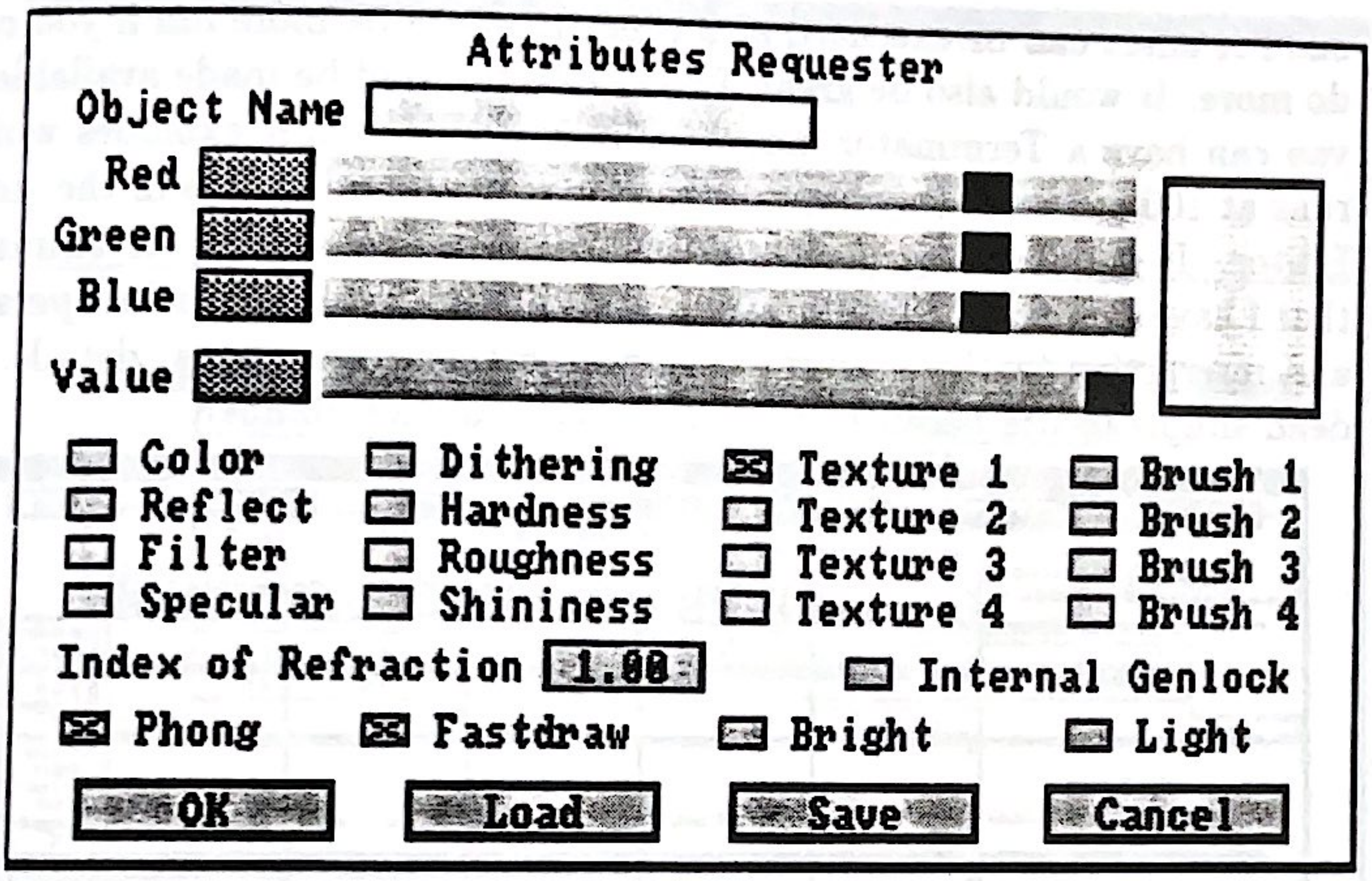

Detail editor: Pick Groups
TOP
y
x
PERSP
FRONT
z
x
RIGHT
z
y
R=Rotate M=Move S=Scale L=Local W=World X-Y-Z axes SPACE=keep ESC=abort

Figure 1: The Detail Editor

The Attributes requester is in this editor. Here all manner of materials can be simulated. Because of the amount of experimentation that is required to find satisfactory settings for things like metals there is an option to save your attributes settings as a file of its own and load it whenever it is needed. This is one of the nicer touches of Imagine. Possibly more interestingly is the availibility of ten predefined textures which range from camouflage to wood and to, you guessed it, checkers. Again the manual recommends that you play with the options which are available for each texture. The mapping of IFF images has been a complete failure to date. I have spent over twenty hours trying to get it to work. And zippo. Not one picture resembled what should have appeared. The blame lies firmly with Imagine and not me on this one. The procedure for mapping a brush is awkward and cumbersome. And they even fail to fully explain it in the manuals. Maybe the next version will correct this.



☐ Color
☐ Reflect
☐ Filter
☐ Specular
☐ Dithering
☐ Hardness
☐ Roughness
☐ Shininess
☒ Texture 1
☐ Texture 2
☐ Texture 3
☐ Texture 4
☐ Brush 1
☐ Brush 2
☐ Brush 3
☐ Brush 4
Index of Refraction 1.00
☐ Internal Genlock
☒ Phong
☒ Fastdraw
☐ Bright
☐ Light

Figure 2: The Attributes Requester

If you have used Anim brushes in DPaint you will see the use of the Cycle Editor. Here you animate different parts of an object so that when placed in an animation it will cycle through its own little animation while everything else proceeds with its own task. The cycled object can now be assigned to a flight path and still do its own thing. The standard example is of an arm reaching out to pick up a pen. When the arm moves everything below it such as the lower arm and hand move as well. This is known as the hierarchy of a cycle object. You can now have the arm reaching out from within a moving train and the hand doesn't suddenly fly down to the end of the train. A project which I am working on at the moment is to create a running Terminator as a cycled object, and then assign it to a path so it looks as if it were really running. Anyone who has used Sculpt4D will appriciate this would be almost impossible without the Cycle Editor.

We now have all our actors (objects) and we have to do some staging. So where better than the Stage Editor? The objects shape can not be altered at this level. Only its size, orientation. and other global features can be changed. Like a real stage there are lights, backgrounds, camera angles and lots more. Finished objects are loaded onto the stage and positioned. If all you want is a still shot then you immediately exit to the Project Editor for rendering. However if you want to animate you can now create trajectory paths for your objects. You may feel you want to use one of the predefined FX effects like rotate. ripple. grow or explode. On the other hand you may want to do some morphing of a silver cube to a Terminator T-1000. Only one FX effect can be executed at a time. It would be more fun if you could do more. It would also be great if more effects could be made available. So you can have a Terminator morphing into a sphere as it explodes while it runs at 100 km/hour (my hope!). The heart of animation lies in the Action Editor. It is one of the most powerful means of organising an animation that I have ever seen. It is literally a script of each actor with all its personal and interactive (with relation to other objects such as paths) details. It's dead simple to use because of it similarity to a wall planner.

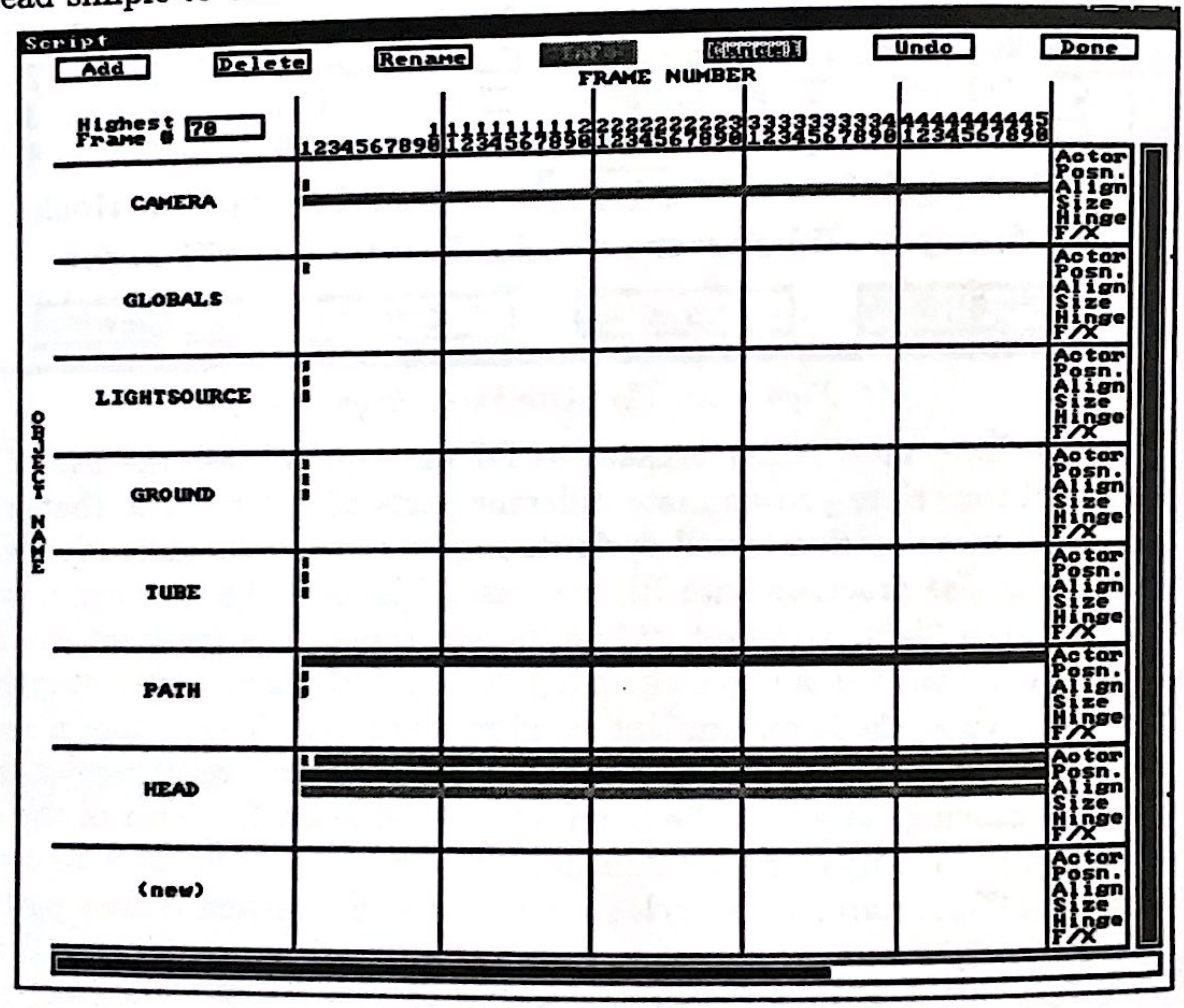
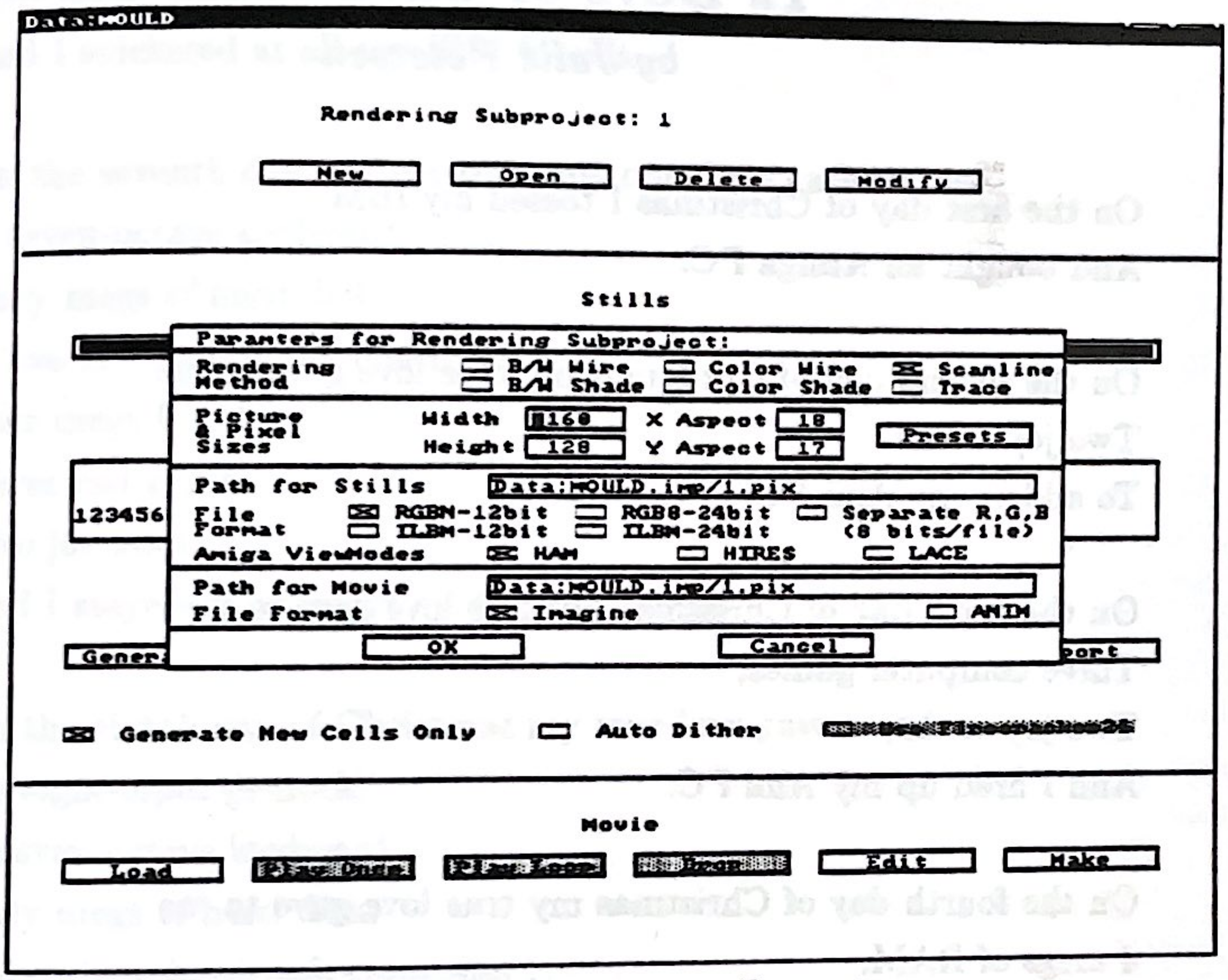


Figure 3: The Action Editor

The rendering engine is housed in the Project Editor. Here you chose the rendering method, size and format for both single frames and animations (as can be seen below in the screen shot of the Modify requester of the Project editor). The process is rather simple, you chose what you want from the above and then render all the frames. In order to make an animation from these frames you hit the Make button. But hang around until it gets past the initalisation stage (as displayed on the menu bar). One time I hit the make button and scampered off to college only to find on my return that a requestor informing me of my lack of lights, cancel or continue, had hung around for the whole day. Needless to say, it did frustrate me a little.



Rendering Subproject: 1

Paramters for Rendering Subproject:

Rendering Method ☐ B/W Wire ☐ Color Wire ☒ Scanline ☐ B/W Shade ☐ Color Shade ☐ Trace

Picture & Pixel Sizes Width 160 Height 128 X Aspect 18 Y Aspect 17

Path for Stills Data:MOULD.imp/1.pix

File Format ☒ RGBN-12bit ☐ RGB8-24bit ☐ Separate R,G,B (8 bits/file) ☐ ILBM-12bit ☐ ILBM-24bit

Amiga ViewModes ☒ HAM ☐ HIRES ☐ LACE

Path for Movie Data:MOULD.imp/1.pix

File Format ☒ Imagine ☐ ANIM

123456

☒ Generate New Cells Only ☐ Auto Dither

Figure 4: The Project Requester

Well now…down to the nitty gritty. How good are the final images it produces? The answer to that is simple, the best I have seen on a standard system. The dithering is smooth. The objects are antialiased only when requested and so not all objects end up being fuzzy at the edges. To anyone that saw them, the images and animations shown during one of the CUGI meetings speak for themselves. To those that are interested in this realm of things, it is a great investment in both work and pleasure. My only advice would be to keep things simple.

12 Days of Christmas

by Julie Petersen

On the first day of Christmas I tossed my IBM,
And bought an Amiga PC.

On the second day of Christmas my true love gave to me
Two joy sticks
To add to my Ami PC.

On the third day of Christmas my true love gave to me
Three computer games,
Two joy sticks,
And I fired up my Ami PC.

On the fourth day of Christmas my true love gave to me
4 megs of RAM,
Three great games,
Two joy sticks,
And I revelled in my Ami PC.

On the fifth day of Christmas my true love gave to me ...
(deep breath) A five-drive hard-disk contro-oller,
Fo-ur me-egs FastRAM,
Three super games,
Two joyous sticks,
And I frisked around my Ami PC.

On the sixth day of Christmas my true love gave to me
A sixty-meg Seagate hard disk,
(Slowly) A five-drive hard-disk controller,
Four megs of RAM,
Three knockout games,

Two joyful sticks,
And I snickered at all my IBM friends.

On the seventh day of Christmas my true love gave to me
A seven-octave keyboard,
Sixty megs of hard disk,
A five-drive hard-disk controller . . .
Four megs RAM,
Three rad games,
Two joy sticks,
And I stayed up all night synthesizing songs.

On the eighth day of Christmas my true love gave to me
An eight-input genlock,
A seven-octave keyboard,
Sixty megs of hard disk,
A five-drive hard-disk controller . . .
Four megs o' RAM
Three cool games,
Two jumpin' for joy sticks,
And I went and bought a desk for my Ami.

On the ninth day of Christmas my true love gave to me
A nine-hour VCR,
An eight-input genlock,
A seven-octave keyboard,
Sixty megs of hard disk,
A five-drive hard-disk controller . . .
Four megs of FASTRAM,
Three awesome games,
Two joyous sticks,
And a classy MIDI-keyboard interface.

On the tenth day of Christmas my true love gave to me
A 10:1 Camcorder,
A nine-hour VCR,
An eight-input genlock,
A seven-octave keyboard.
Sixty megs of hard disk,
A five-drive hard-disk controller ...
Four megs of FASTRAM,
Three awesome games,
Two joyous sticks,
And a classy MIDI-keyboard interface.

On the eleventh day of Christmas my true love said to me
"I've spent all my money,
I never get to see you,
You'd bet-ter decide,
Between me and your Amiga computer ..."

(Loooooong pause)

On the twelfth day of Christmas my Amiga said to me ...
"Hel-lo, I yam yore kumpu-ter
I can talk, I can play ..."

To BBS or not to BBS

or

Should CUGI Set Up a Bulletin Board?

by Brian Ward

During several rows on the above topic, a few discussions have broken out as to whether it is (a) feasible and (b) affordable for CUGI to set up a BBS. Being a fanatic of BBSs and also The Treasurer, I can see both sides of the argument, which I will outline for you.

Pros

A properly run BBS is a wonderland to the novice and a source of information and amusement to the experienced user. I know that BBSs appeal only to a certain type of person and not everyone who is a computer user is "that type of person". However, if you are, then a BBS can be of invaluable help to you. Certainly, most of the boards in the Dublin area offer a few gigabytes at this stage of software for the price of a local call. There is always a boffin on the board who knows a little bit more about a certain subject than others and is only too willing to share it with others who happen to have a problem. Also, the first place you are likely to hear of a new virus, is on a board, which is also where you are likely to get the killer for the same virus just as soon as it appears.

If you really are into communicating with the world, get yourself a Fidonet number and pretty soon you could have your problems that your having with a particular program, being answered by the author himself (not unknown). So what would CUGI offer the members? Well it has been suggested that the Fish catalogue be put on line. What else? Well that would be up to you.

Cons

This is the very area that causes the rows. It usually starts like this:

CHAIRMAN: The survey says that we should set up a bulletin board.

TREASURER: Fine, but who's going to pay for it?

LIBRARIAN: Don't we have a lot of money at the moment?

TREASURER: Yes, but if we spend it all on one thing (that might not succeed) then we will have no money left to buy essentials like disks and software.

MEMBER: What's the point in setting up another BBS anyway? There are loads in the city, and from what I can see, there are fewer and fewer people logging on because they have either set up their own BBS, or it's too expensive to ring, or they're just fed up.

LIBRARIAN: That's not the point. The survey said that we should set up a BBS and that's what our members want.

TREASURER: There were less than a third of the members who returned their questionnaires, so the other 66% have to comply with their wishes. Not only that, who's going to run it? I and most of the rest of the committee are at college, part time or full time, so we can't do it. We also need a modem (ideally 9600 baud) and a hard drive (ideally 100 Mb or more) dedicated to the BBS.

And that's how the row usually develops. However you can see the argument for both sides. On the one hand it would be beneficial in the short term. However, in the long term it would be a massive drain on the club's resources financially. It would also be a huge investment in time and labour for the individuals to set it up, keep it interesting and most of all keep it going. The reason that many BBSs close down, is that running it ceases to be fun and that's what it all boils down to. If it's not fun, then forget it. Then where does that leave the club? Heavily committed financially to an aborted project.

Don't get me wrong. I love BBSs and support almost every BBS in the city that will have me. But I have one problem that a lot of people will have. I don't have a modem of my own. I have to borrow one from work. I hope to rectify the situation in the near future, but a lot of you will have other priorities like a Hard Drive or even a second drive, before you even think of a modem. Another thing to consider is who is the BBS would be open to. Should it be members only—which limits the user base to club members who (a) have modems, (b) aren't using them to run a BBS at the moment, (c) are not using them to log on to the UNIX system at college at the moment or (d) who would be interested in what our board has to offer? Or should it be open to the public and if so should they be made to pay because they're not members of CUGI? One suggestion, is that we buy, beg, borrow or steal time on another BBS and have CUGI as a SIG (Special Interest Group). This would be a lot easier to set up, easy to update because it would be only one area on a board, and a helluva lot cheaper to run.

This will not be an easy one to settle. However, if there is anyone out there who would like to make a suggestion, please feel free to approach anyone on the committee. I guarantee you'll be given a friendly ear. In the meantime, here's a list of the free BBSs in the Dublin area for you to check out to see what the competition is like.

Board	Phone	Sysop	Hours	Speeds
Amigagate	205135	Martin Browne	8pm–9am	V21–23
Crackhouse	215447	Barry O'Donnell	11pm–8am	V21–22b/HST
DECBBS	2882454	Declan McArdle	24 hrs	V21–32/HST
ICGPBBS	785866	Garret Hayes	6pm–8am	V21–23
I.C.O.N.	971660	Dean Murphy	24 hrs	V21–22b/HST
Infomatique 1	302970	Liam Murphy &	24 hrs	V21–23
Infomatique 2	302344	Eddy Carroll	24 hrs	V21–32
Nemesis	324755	Andy Mowatt	24 hrs	V21–22b/HST
Network 23	574160	Jason Mulreany	12am–8am	V21–22b
Owls BBS	344079	Stephen Doyle	9pm–9am	V21–22b
TOPPSI 1	711047	David Doyle	24 hrs	V21–32/HST
TOPPSI 2	773547	David Doyle	24 hrs	V21–32/HST

Did you know...?

by The Discounts Officer

Most of the members who come to the meetings are aware of the many and various items we can supply but for the benefit of those who are unaware, I thought I'd bring you up-to-date. For our newer Associate Members, this will be *news.*

Disks

CUGI stocks (okay, *usually* stocks) 3½" and 5¼" disks. These days, you'll find some high density disks for PC owners, too! The cost are quite reasonable:

Type	Cost each £	Cost per 10 plus 1 free £
5¼"	0.20	2.00
3½" DD	0.50	5.00
3½" HD	1.00	10.00

Books

The Book Library continues to grow but, as anyone who has bought a computer book recently knows, the cost is quite high. We've one or two

ROM Kernel Manuals (version 2.0, of course to get and there's a book on modems on the way. After some discussion, it has been agreed that it would be unwise to allow books to be loaned to Associate Members (it sounds worse than it should!) plus the cost of postage and the delay in sending and returning them could inconvenience other members. By the way, if you are a C64/C128 owner you might persuade the Book Librarian to part (permanently) with some of the less used titles ... for a small price.

If you do want to get books on computers and computer-related topics, we recommend MicroMail in Cork. Their service is excellent and their prices very competitive, even after you've added the £2 next day delivery charge.

RAM and other sheep

Moving onto more expensive items, RAM and extra disk drives to name two, you should be aware that we can supply RAM chips for the A590 and most expansin RAM boards at a reasonable cost. It used to be £22 per half Meg but a recent deal has brought this down to roughly £35 per Meg. While I'm on the subject of extra RAM, it is worth pointing out that anyone buying a half Meg expansion board is seriously wasting money. If you have an Amiga 500 (*not* the Plus) and you need to expand your memory, you have two options—buy a hard drive with RAM expansion facilities (e.g. Commodore's slow/small A590 can take up to 2 Meg or GVP's unit which can take up to 8 Meg but using a different type of memory chip than the above) or you can buy a 2 Meg expansion board. The latter will invalidate your warranty and will require someone competent to fit it but within the club, we have no shortage of expertise and experience in this area.

If you do have an Amiga 500 Plus, I've recently organised a supply of the A500 Plus 1 Meg expansion boards. These should cost somewhere in the region of £40-50 fully populated and fitting one does not invalidate your warranty. This unit would bring an Amiga 500 Plus to 2 Meg—a comfortable amount of memory by today's standards.

Floppy Disk Drives

Apart from extra memory, the A500 owner should find the need of a second drive to save disk swapping, etc. fairly obvious after a short while. Up to recently, we've bought drives within Ireland but I must say, their reliability isn't up to much. When they work, they work very well but the last two batches suffered a 50% failure rate. I find this unacceptable and another source will be found even if this means a higher price. Meanwhile, the last few (yes ... they DO work) will be sold at the usual price of £50 but expect a price of £60 from any other source.

Spare Parts

We can also get spare parts for a variety of electrical items covering brand names such as Commodore, Amstrad, Ferguson, Aiwa, etc. I won't even try to cover the wide range of bits and pieces available but suffice it to say that recent orders included:

- Spectrum keyboard membrane
- Printer cables
- Audio Tapes
- SID chip
- A de-soldering tool (Tom strikes again!)
- Joystick extenders

Modems, Scanners, etc.

Some members will have heard about a new v.everything (see Karl's article), send/receive fax modem from Supra, others have just read about it (here!). Its RRP is $399 and it should be cheaper by mail order, etc. With the increasing amount of information becoming available (you'll need a degree in IT soon just to understand it all) *and* increases in telephone charges, the ability to send and receive data quickly (very quickly) becomes vital. If this modem does all its tricks, it'll be magic. Our correspondent in the States rang Supra a fortnight ago to check on its availability: "Four weeks", they said. He rang a couple of days ago to see how thing have progressed: "Four weeks", they said ...

When we showed off the scanner bought by the college some months ago, some members were disappointed to find that, as such, it could not be borrowed. I have checked out a source for that same scanner (including the *Touch-Up* software) and interested parties should contact me.

The Big Stuff

The discount scheme allows members who have been with the club for at least six months to be considered for the purchase of items such as hard drives, monitors, upgrades of computers, etc. Although, I've said it often enough, I 'll repeat, for the benefit of one or two members with hearing problems or whatever, that this part of the scheme is kept fairly low-key. We don't need it but it is very useful to those who have *serious* computer needs. If you have saved up for some large item, *then* contact me and we'll see what we can do for you. Don't come 'shopping' and don't expect me to quote prices—we're not a business requiring high volume sales. We get the discounts on the basis that those who avail of them are in some way, bettering the Amiga community. So far, we've been quite successful but

I'd ask members to not discuss prices, availability, etc. If someone asks you "How much did you get your XXXX for?", chances are that they've been sent packing by me for doing the same thing. I'm sure you'll think of a suitable reply!

Borrowing Hardware

While the club owns only a few hardware items of significant value, we do lend items to members where appropriate. One new item to add to the list is the A690 CDTV adapter. For A500 owners (with 1 Meg of chip RAM), this gives you most of the facilities of a CDTV. A review of this item will probably appear in the next newsletter but members wishing to borrow this will need to:

- have been a member for at least six months
- put down a deposit of £20
- pay £2 a week towards buying some CD-ROMs
- bring it back for the start of the next meeting after borrowing it

We hope to get the Fred Fish disks on CD-ROM to ease the release of his disks so it will be important that the A690 is present at every meeting (no excuses!). Let's hope that we won't have to impose fines or other penalties. Of course, if this experiment is successful, we may invest in other hardware items. Doubtless, you'll pass on your ideas to us ...

The Final Word

Most items that pass through the discount scheme have had 5% added to help the club's finances. We make no secret of this—it applies to disks, RAM chips and all the way up to CRAY IIs (okay ...there hasn't been a rush on *them*). We didn't add the 5% to the cost of the V2.0 Upgrade Packages and some other items are passed on just rounded up to the nearest pound.

So there's a brief, and reasonably comprehensive, round-up of some of the things on offer. I suppose the question that must be answered now is "What can you do for the club?". Good question—eh? Ever thought of doing a demo at a meeting or writing an article for the newsletter? No? Well, start thinking! Cheers.

Camera ready pages for this issue were produced using the following:
Sharp Laser Printer
Amiga 3000/25-100
Amiga 1500/40-180
AmigaTEX V3.0
CygnusEd Professional

Photocopied by
whoever was available